

LEARNING ORIENTATION AND INNOVATIVENESS OF SMALL AND MICRO ENTERPRISES

Chenuos, Nehemiah Kosgei and Maru, C. Loice

*Department of Management Science, School of Business and Economics, Moi University,
P.O. Box 3900, 30100, Eldoret, Kenya.*

ABSTRACT: *This paper examines the effect of learning orientation on innovativeness of small and micro enterprises. Three dimensions of learning namely: commitment to learning, shared vision and open-mindedness and their affect on innovativeness of the firms are explored. Learning theories and diffusion of innovation theory underpinned the study. The paper is based on a survey of 333 entrepreneurs who were also owners of the firms. A closed-ended questionnaire was used to collect data, which was analyzed both descriptively and inferentially. Significant results obtained showed that entrepreneur's open-mindedness and shared vision affect firm's innovativeness. Thus firms need to flexibly embrace participative approaches that demonstrate open-mindedness and sharing with key stakeholders whose support is much needed for shaping new ideas that enrich innovativeness. The findings provides empirical support that innovativeness is not necessarily an outcome of an entrepreneur's commitment to learning but an involvement of stakeholders to inculcate an enduring learning orientations.*

KEYWORDS: Learning Orientation, Innovativeness, Small and Micro Enterprises

INTRODUCTION

Several decades, scholars have increasingly focused on innovation as a key factor in the creation of firms' sustainable competitive advantages. Innovation is the transformation of knowledge into economic action. Innovation, regarded as a learning process based on different sources and adaptation, is a basic prerequisite for economic growth (Tang, 2006; Correa, 2007). It is assumed that learning orientation plays a key role in defining innovation. Akgun *et al.* (2007) argue that a firm's emotional capability helps it to focus its employees on new product development and firm innovativeness.

A fundamental goal of innovation in firms is to create new information and instruments, which to ensure the development of organizations. Many scholars argue that organization's performance is closely related to organizational learning (Correa, 2007). Further, learning orientation and innovation are deemed closely related. Among the values necessary for organizational innovations is the use of information and continuous learning approaches.

Many researchers have found evidence for the relationship between innovativeness and performance (Kropp *et al.*, 2006; Lin *et al.*, 2008; Rhee *et al.*, 2010). Researchers have frequently mentioned learning orientation as one of the antecedents of innovativeness (Calantone *et al.*, 2002; Wang, 2008). In addition, learning orientation is important for a firm's competitive advantage (Sinkula *et al.*, 1997), and the literature has generally focused on the effects of learning orientation on financial performance (Wang, 2008). Recently,

however, Other researchers have found that learning orientation affects performance and that innovativeness is a mediating factor that also directly affects performance (Akgün *et al.*, 2007; Aragón-Correa *et al.*, 2007; Keskin, 2006; Rhee *et al.*, 2009; Calantone *et al.*, 2002; García-Morales *et al.*, 2007). Lloréns Montes (2005) found that organizational learning influences the administrative and technical innovation gap as well as performance, and also established that organizational learning has a direct effect on performance.

A majority of studies on the relationships between learning orientation and firm innovativeness and financial performance have ignored the direct effect of learning orientation on firm innovativeness (Hult *et al.*, 2004; Rhee *et al.*, 2009). Additionally, many studies have failed to test the significance level of the direct effect of learning orientation on firm innovativeness. This study therefore, sought to fill this gap by investigating the effects of learning orientation on SMEs innovativeness and developed and tested the following research hypotheses:

H₀₁: Commitment to learning has no significant effect on firm innovativeness

H₀₂: Shared vision has no significant effect on firm innovativeness

H₀₃: Open minded has no significant effect on firm innovativeness

LITERATURE REVIEW/THEORETICAL UNDERPINNING

Innovativeness in Small and Micro Enterprises

In the World Bank report (2009) innovation has been viewed as vital in ensuring competitive advantage by organization and long term loyalty. The importance of innovation as a key factor of economic growth and development was also highlighted by Joseph Schumpeter in his Theory of economic development (1912) who considered the entrepreneur task and capacity to realize new combinations of the production factors i.e innovation, as the basis of his theory. According to Casals (2011), globalization of the markets and increasing international competition force SMEs to search for new, innovative, flexible and imaginative ways to survive. Therefore, the above statement provides a relationship between innovation and SME survival.

Oncioiu *et al.*, (2003) asserts that innovation is an important ingredient in the current knowledge-based society and by extension to SMEs' performance, However there is little evidence in emerging economies about this, yet SMEs need to consider continuously improving production costs, delivery schedules, manufacturing skills, supplier relationship and productivity in all practices (De Wit *et al.*, 2007). SMEs that have adapted their production systems to be flexible and their costs and prices competitive are able to compete and capture increased market share. This signifies the importance of innovation in enhancing loyalty and long term customer value (John, 2007)

Kemp *et al.* (2003) found that the innovation output is determined by the innovative input, for example the transformation of input into output. Finally, the innovative output is related to the firm performance. In the same vein Oncioiu *et al.*, (2003) in their study in Romania noted

that innovation boosted competitiveness of SMEs in Romania thus signifying high performance within the organizations.

Rothwell (2006) indicates that SMEs exhibit behavioral features that give them an innovative advantage over larger firms, for example, SMEs are thought to be more able to respond rapidly to external threats or opportunities; they have more efficient internal communications, and exhibit interactive management styles. Conversely, SMEs are thought to lack the material and technological resources that enable large firms have to spread risk over a portfolio of new products' and fund longer-term R&D (Rothwell, 2004). Thus, it is perhaps unsurprising that innovatory advantage is unequivocally associated with neither large nor small firms (Rothwell, 2004).

Hoffman *et al.*, (2009) indicates that the vast majority of studies considering innovation in SMEs fail to link these practices with performance (output, exports, employment, market share). In the absence of studies assessing innovation and firm performance it is useful to consider, for the purpose of developing an adequate methodology, the relationship between competence derived from learning and innovativeness of firms.

Learning Orientation in Small and Micro Enterprises

Salim, and Sulaiman, (2011) investigate the effect of organizational learning orientation as well as the impact of innovation on company performance in the small and medium size firms of Information, Communication and Telecommunications Industry (ICT) in Malaysia. By analyzing 320 small and medium size enterprises operating in the ICT industry this study found evidence that organizational learning contributes to innovation capability, and that innovation is positively related to firm performance

Garrido and Camarero (2010) analyze the relationship between learning orientation, innovation and performance for the case of 386 British, French and Spanish museums. In concurring with the literature which links learning orientation to organizational performance, this study found that learning orientation is reflected in enhanced financial and social performance. The study confirms that learning orientation determines the implementation of organizational innovations although the effect was noticeably higher for large museums than for small ones.

Ma'atoofi and Tajeddini (2010) reveal that learning orientation affects innovation of small firms in 82 small firms of Tehran. The results obtained from regression analysis were indicative of the existence of significantly positive relationship between organization's commitment to learning, open-mindedness and shared vision and innovation of small firms.

Calantone *et al.* (2002) studied the impact of learning orientation using the four variables in several US firms. With the use of path analysis, the findings suggest a positive effect of learning orientation on firm innovation. Similarly, Ussahawanitchakit (2008) found that shared vision, open-mindedness, and intra-organizational knowledge sharing have significant positive and direct effects on Thai accounting firms' innovation orientation.

Commitment to Learning

Central to the organization's learning orientation is the fundamental value it holds toward learning. This value influences whether an organization is likely to promote a learning culture. If an organization places little value on learning, little learning is likely to occur (Sinkula *et al.*, 1997). Commitment to learning is associated with a long-term strategic orientation (Calantone *et al.*, 2002).

Shared Vision

Shared vision refers to an organization-wide focus on learning (Calantone *et al.*, 2002). Shared vision influences the direction of learning (Sinkula *et al.*, 1997) and leads to increase in the quality of learning. Infact, without shared vision, learning of individuals in organization will be extremely meaningless. In the otherwords, even though individuals are stimulated for learning, their problem is that they do jot know what to learn unless they have a shared vision (Eshlaghy and Maatofi , 2011).

Open-mindedness

Open-mindedness refers to the critical evaluation of organization's daily operations and the acceptance of new ideas. In the other words, it is a process through which organization starts deleting the existing knowledge or the repetitive assumptions and habits (Eshlaghy and Maatofi , 2011: 116)

METHODOLOGY

This study used an explanatory research design. This is because the study is cause-effect in nature. The study was based in Eldoret Municipality in Uasin-Gishu which is located in North Rift, Rift Valley Province of Kenya. The study area was chosen due to the rising number of SMEs that start but stagnate in growth due to competition. A target population of 2000 SMES (Eldoret municipality annual reports, 2014). The study used Yamane (1967:886) simplified formula to calculate sample sizes of 333 respondents. The study also used multi-stage sampling design. For this study, a questionnaire was used to collect data. The questionnaire was structured using the Likert format with a five-point response scale. Reliability was determined by administering Crobach alpha (≤ 0.7) test to evaluate the alpha value for all the variables under study.

Measurement of Variables

All latent variables were tested and measured using multiple items based on previous studies (as recommended in' Churchill Jr., 1979). Firm innovativeness was measured as a second-order construct via three first-order indicators: product innovation, process innovation and business system innovation. The firm innovativeness scale was based on previous studies (iAvlonitis,1994; Deshpandé *et al.*, 1993; Knowles *et al.*, 2008; Wang and Ahmed, 2004) where a five-point Likert scale was used to measure the first-order indicators, which ranged from 1 (strongly disagree) to 5 (strongly agree).

Learning orientation was measured as a second-order construct and was measured through four first-order indicators based on work by Calantone *et al.* (2002) and several earlier studies (Galerand Van der Heijden, 1992; Hult and Ferrell, 1997; Sinkula *et al.*, 1997). Three under-dimensions were commitment to learning: shared vision and open-mindedness. Each of the dimensions was measured using three items. The three items with higher standard loadings based on Calantone *et al.* (2002) study were selected. A five-point Likert scale was used to measure the first-order indicators; the scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Data Analysis and Model Specification

The study used explanatory research design where descriptive statistics such as; mode, mean and median to describe and compare variables numerically were generated and inferential analysis performed. Furthermore, analysis was done using correlation and multiple regression techniques. Correlation technique helped in revealing how the variables related to each other either positively or negatively related. On the other hand, linear multiple regression analyses was used to show extent of variations explained by the independent variables through the coefficient of determination (R^2) and Hypothesis testing

RESULTS AND DISCUSSIONS

Descriptive Statistics

The findings in Table 1 below provide descriptive statistics for all variables. Results showed that innovativeness had the highest mean of 2.4974. This implies that employees demonstrated more innovativeness as compared to commitment to learning (mean = 1.8339). To determine the relationship between commitment to learning, shared vision and open mindedness and innovativeness, Pearson correlation was computed. Table 1 below presents the results of Pearson correlation. The results in table 1 indicate that, there is positive and significant relationship between open mindedness and innovativeness ($r = 0.660$, $p < 0.01$), shared vision and innovativeness ($r = 0.465$, $p < 0.01$), commitment to learning and innovativeness ($r = 0.247$, $p < 0.01$). The finding on table 4.1 indicates that the highest relationship is found between open mindedness and innovativeness ($r = 0.660$, $p < 0.01$).

Table 1: Correlation Results

	Mean	Std. Deviation	Innovativeness	Commitment To learning	shared vision	open minded
Innovativeness	2.4974	0.69619	1			
Commitment to learning	1.8339	0.61678	.247**	1		
Shared vision	2.0641	0.61972	.465**	.494**	1	
Open mindedness	2.4368	0.6959	.660**	.286**	.526**	1

** Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data, 2014

Multiple Regression Analysis

Linear Multiple Regression analysis was employed to examine the effect of commitment to learning, shared vision and open mindedness on innovativeness. The study used ANOVA to test the relationships since ANOVA removes some of the random variability so that significant differences can be found more easily and also helps to look at interactions between factors. The significance value is 0.000 which is less than 0.05 and the F critical (value = 74.707) thus the model is statistically significance in predicting innovativeness. The three independent variables that were studied, explain 45.4% of the variation in innovativeness as represented by the R^2 . Further, the Durbin-Watson value was within the thumb rule (1.993) hence there is no serial correlation.

Hypothesis Testing

Hypothesis testing is based on standardized coefficients beta and p-value to test whether the hypotheses are rejected or not.

Hypothesis 1

H_{01} : *Commitment to learning has no significant effect on firm innovativeness*

The results of multiple regressions, as presented in table 2 revealed that commitment to learning has an insignificant effect on innovativeness as evidenced by a betavalue of $\beta_1 = 0.004$ (p-value = 0.941 which is more than $\alpha = 0.05$). Therefore, the null hypothesis that commitment to learning has no significant effect on innovativeness is supported. Contrary to these findings, Calantone *et al.* (2002) echo that organizations that are committed to learning have high level of innovativeness. As well, Damanpour (1991) notes that firms committed to learning increase their ability to innovate as compared to competitors.

Hypothesis 2

H_{02} : *Shared vision to learning has no significant effect on firm innovativeness*

The results in table 2 show that the standardized coefficient beta and p value of shared vision were positive and significant ($\beta_2 = 0.161$, $p < 0.05$). Thus, the null hypothesis that shared vision has a positive and significant effect on innovativeness is supported. Also, for each unit increase in shared vision, there is 0.161 unit increase in innovativeness. Consistently, Baker and Sinkula, (1999) note that shared vision plays a key role in firm innovativeness. Similarly, lack of shared vision limits creative ideas in an organization (Hult GTM., 1998.).

Hypothesis 3

H_{03} : *Open minded to learning has no significant effect on firm innovativeness*

As shown in table 2, p-value is significant ($p < 0.05$), and the beta value of open mindedness was positive ($\beta_3 = 0.574$). Therefore, the null hypothesis is supported and hence the conclusion that open mindedness has a positive and significant effect on innovativeness. Consequently, for each unit increase in open mindedness, there is 0.574 unit increase in innovativeness. In conformity with the findings of the study, it is through open mindedness that firms delete the existing knowledge and adapt new ideas (Nguyen *et al.*, 2006). Further support to the study is

by Sinkula *et al.*, (1997) who assert that through open mindedness, firms are able to critically evaluate their operational activities and embrace new ideas.

Table 2: Multiple Regression Results

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	0.717	0.135		5.326	0.000		
Commitment to learning	0.004	0.058	0.004	0.075	0.941	0.755	1.324
Sharedvision	0.18	0.066	0.161	2.751	0.006	0.595	1.681
Openminded	0.575	0.053	0.574	10.84	0.000	0.723	1.384
R Square	0.454						
Adjusted R Square	0.448						
Durbin-Watson	1.993						
ANOVA (F prob)	74.707						
Sig.	.000b						

a Dependent Variable: Innovativeness

Source: Survey Data, 2014

Implications to Research and Practice

As evidenced in the results, commitment to learning has no significant effect on firm innovativeness. Therefore, the firms should be cautious of the capabilities such as commitment to learn in implementing innovativeness. As well, firms should not only promote a learning culture but also understand the need for change so as to gain competitive advantage. Further, there is need for employees to share existing knowledge in order to enhance firm innovativeness.

There is also evidence of a positive effect of shared vision on firm's innovativeness. It is therefore, prudent for SMEs to have a commonality of purpose in their organization as well as commitment by all employees to attain the set goals. There is also need for total agreement on organizational vision across all levels in order to present innovative responses.

Finally, firms need to support a culture of open-mindedness since it enhances firm innovativeness. It is therefore, imperative for firms to go beyond their usual way of thinking in order to adapt new ways of doing things that are beneficial to them. Specifically, the quality of decisions and activities taken over time need to be continually judged. Also, the way customer information is interpreted need not be fixed. Ultimately, the small firms will be able to increase their ability to implement new ideas, processes and/or products.

CONCLUSION

In contrast to past studies (Damanpour, 1991; Calantone *et al.* (2002) this study established that commitment to learning has no significant effect on firm innovativeness. This implies

that firms should not only enhance commitment in learning but also have the ability to understand the need for change. Moreover, the results are indicative of a significant positive effect of shared vision on firm innovativeness. In other words, it implies that there is commonality of purpose in the organization. As such, there is a full understanding of customers, competitors and emerging technology due to commitment to the goals of the organization.

Further, the ability of firms to question routines, assumptions and beliefs helps organizations to use and support new ideas which ultimately increase firm innovativeness. It is also through open-mindedness that firms go beyond the usual and familiar ways of thinking and acting, and continually judge the quality of the decisions taken over time. In so doing, such organizations are able to adapt to changes in the innovation landscape.

FURTHER RESEARCH

This study investigated effect of learning orientation on firm innovativeness. Generalization of the findings was limited to SMEs in Uasin Gishu County in Kenya due to the unique context of operation. Thus there is need for a further study to enhance the scope and to compare the sub-sectors of SMEs. Furthermore, the study focused on small firms, and this opens the opportunity for a similar study on large firms. Finally, future research can be conducted to link intra-organizational relationships with learning orientation and firm innovativeness

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